

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL SEARCHING AUTHORITY

To:

STRADLING Yocca CARLSON & RAUTH
Attn. Cullman, Louis C.
660 Newport Center Drive
Suite 1600
Newport Beach, California 92660
UNITED STATES OF AMERICA

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

RECEIVED

MAR 02 2004

(PCT Rule 44.1)

MAR 26 2004

Stradling Yocca Carlson & Rauth

Date of mailing
(day/month/year)

24/02/2004

Applicant's or agent's file reference

P1211 (14364.49)

FOR FURTHER ACTION

See paragraphs 1 and 4 below

International application No.

PCT/US 03/30010

International filing date
(day/month/year)

18/09/2003

Applicant

MEDTRONIC VASCULAR, INC.

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Sandrine Polenzani

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P1211 (14364.49)	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/US 03/30010	International filing date (day/month/year) 18/09/2003	(Earliest) Priority Date (day/month/year) 18/09/2002
Applicant MEDTRONIC VASCULAR, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 07 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.

INTL. NATIONAL SEARCH REPORT

International Application No

PCT/US 03/30010

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61L31/10 A61L31/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,Y	WO 00 32255 A (SCIMED LIFE SYSTEMS INC) 8 June 2000 (2000-06-08) claims 1,2,4,8,10 page 5, line 26-28 page 11, line 17-29 page 13, line 19,20 page 14, line 9,10 page 17, line 11-27 page 21, paragraphs 14-21 ---	1-25
X,Y	US 6 368 658 B1 (KAMATH KALPANA ET AL) 9 April 2002 (2002-04-09) claim 21 example 7 column 4, line 30-39,54-56 column 7, line 3-9,20-32 --- -/--	1-25

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

12 February 2004

Date of mailing of the international search report

24/02/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Peris Antoli, B

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,Y	US 5 824 048 A (TUCH RONALD J) 20 October 1998 (1998-10-20) claims 1-8 column 3, line 6-22 column 6, line 33-65 example 8 ---	1-25
X,Y	WO 93 06792 A (SCIMED LIFE SYSTEMS INC) 15 April 1993 (1993-04-15) claims 1,2,4 page 19, line 24 -page 21, line 9 ---	1-25
X,Y	WO 00 45734 A (WRIGHT MEDICAL TECH INC) 10 August 2000 (2000-08-10) claims 1,4-8 page 1, line 28-33 page 3, line 27-32 page 5, line 29-33 ---	1-25
X,Y	WO 02 26139 A (CORDIS CORP) 4 April 2002 (2002-04-04) example 4 figures 4,5 page 8, line 15,16 page 20, line 1-16 ---	1-25
Y	DUNNE M ET AL: "Influence of particle size and dissolution conditions on the degradation properties of polylactide-co-glycolide particles" BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 21, no. 16, August 2000 (2000-08), pages 1659-1668, XP004200585 ISSN: 0142-9612 page 1659, column 2, paragraph 2 -page 1660, column 1, paragraph 1 ---	1-25
Y	JAIN R A: "The manufacturing techniques of various drug loaded biodegradable poly(lactide-co-glycolide) (PLGA) devices" BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 21, no. 23, 1 December 2000 (2000-12-01), pages 2475-2490, XP004216917 ISSN: 0142-9612 page 2476, column 1, paragraph 5 -column 2, paragraph 2 -----	1-25

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-25 (partially)

Present independent claims 1, 11 and 12 relate to coating(s) which are defined by reference to a desirable characteristic or property, namely

(i) "coating having at least two layers, each of them having at least one physical property affecting the releaseability of a therapeutic compound, said property differing from one to the other layer" 'see claim 1!;

(ii) "controllable drug releasing gradient coating" 'see claim 11!; and

(iii) "first (coating) layer having at least one physical property affecting the releaseability of a therapeutic compound, and at least one additional layer differing in said at least physical property" 'see claim 12!.

The dependent claims 5-6 or 17-18 indicate one physical property of the coating layers -namely, the molecular weight-, and claims 7 or 19 indicate various kinds of polymers of which at least one of the layers could be constituted. However, none of the claims gives a concrete definition of both coating layers.

The claims cover all coating layers having the aforementioned characteristics or properties, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT only for theoretical examples of said layers. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the coating layers by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, namely medical implants comprising anti-restenotic drugs as defined in claims 8-10 or 21-25.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 03/30010

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claim 11 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 1-25 (partially)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/30010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
2 WO 0032255 A	08-06-2000	US 6335029 B1 AU 758175 B2 AU 3099900 A CA 2353604 A1 EP 1135178 A1 JP 2002531183 T US 2002054900 A1 WO 0032255 A1	01-01-2002 20-03-2003 19-06-2000 08-06-2000 26-09-2001 24-09-2002 09-05-2002 08-06-2000
US 6368658 B1	09-04-2002	AU 4465300 A CA 2368962 A1 EP 1171245 A2 JP 2003524465 T WO 0062830 A2 US 2002127327 A1 US 2001022988 A1	02-11-2000 26-10-2000 16-01-2002 19-08-2003 26-10-2000 12-09-2002 20-09-2001
US 5824048 A	20-10-1998	US 5464650 A DE 9422438 U1 DE 69431457 D1 DE 69431457 T2 EP 1181943 A1 EP 0623354 A1 JP 8033718 A US 2002138048 A1 US 5837008 A US 5679400 A US 5624411 A US 5776184 A	07-11-1995 25-04-2002 07-11-2002 26-06-2003 27-02-2002 09-11-1994 06-02-1996 26-09-2002 17-11-1998 21-10-1997 29-04-1997 07-07-1998
1 WO 9306792 A	15-04-1993	US 5968092 A WO 9306792 A1 US 2002099434 A1 US 5464450 A US 5551954 A US 5500013 A US 6387124 B1 US 5769883 A	19-10-1999 15-04-1993 25-07-2002 07-11-1995 03-09-1996 19-03-1996 14-05-2002 23-06-1998
3 WO 0045734 A	10-08-2000	AU 760593 B2 AU 2621600 A CA 2360938 A1 EP 1152709 A1 WO 0045734 A1 US 2002197315 A1	15-05-2003 25-08-2000 10-08-2000 14-11-2001 10-08-2000 26-12-2002
4 WO 0226139 A	04-04-2002	US 2001029351 A1 US 2002165608 A1 US 2002133183 A1 AU 1129902 A AU 1132102 A AU 7730201 A AU 9316101 A AU 9486901 A CA 2357881 A1 CA 2424029 A1 CA 2424038 A1 CA 2424049 A1	11-10-2001 07-11-2002 19-09-2002 08-04-2002 08-04-2002 11-04-2002 08-04-2002 08-04-2002 29-03-2002 04-04-2002 04-04-2002 04-04-2002

INT. NATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/30010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0226139	A	CA 2425753 A1	04-04-2002
		EP 1192957 A2	03-04-2002
		EP 1335761 A1	20-08-2003
		EP 1322235 A1	02-07-2003
		EP 1322351 A1	02-07-2003
		EP 1322342 A1	02-07-2003
		JP 2002238994 A	27-08-2002
		WO 0226280 A1	04-04-2002
		WO 0226139 A1	04-04-2002
		WO 0226281 A1	04-04-2002
		WO 0226271 A1	04-04-2002
		US 2002094440 A1	18-07-2002
		US 2002111590 A1	15-08-2002
		US 2002051730 A1	02-05-2002
		CA 2408754 A1	22-11-2001
		EP 1280571 A1	05-02-2003
		WO 0187375 A1	22-11-2001
		WO 03000308 A1	03-01-2003
		US 2003065377 A1	03-04-2003
		US 2003065345 A1	03-04-2003
		US 2003065346 A1	03-04-2003